REMARKS

Claims 1-7, 9-13, and 15-21, as amended, are pending in this application. In this Response, Applicants have amended certain claims. In light of the Office Action, Applicants believe these amendments serve a useful clarification purpose, and are desirable for clarification purposes, independent of patentability. Accordingly, Applicants respectfully submit that the claim amendments do not limit the range of any permissible equivalents.

In particular, claims 1 and 9 have been rewritten to further clarify the invention. As no new matter has been added, Applicants respectfully request entry of these amendments at this time.

THE DOUBLE PATENTING REJECTION

The Examiner provisionally rejected claims 1, 9, and 15 on the ground of nonstatutory obviousness-type double patenting as obvious over co-pending Application 10/861,441. Office Action at Pages 3-4.

Applicants respectfully submit that, in accordance with MPEP § 804(I)(b), the Examiner should withdraw the rejection in the instant application and permit the instant application to issue as a patent. According to MPEP § 804(I)(b), if the "provisional" double patenting rejection is the only rejection remaining in the instant application, the Examiner should withdraw the rejection and permit the instant application to issue as a patent, thereby converting any future "provisional" double patenting rejections in the other application, *i.e.*, the '441 application, into a double patenting rejection at the time the instant application issues as a patent. Currently, the '441 application is pending after receiving a non-final rejection.

In light of this discussion, Applicants respectfully request reconsideration and withdrawal of the provisional double patenting rejection.

THE REJECTION UNDER 35 U.S.C. §101

Claims 1-7, 9-13, and 20-21 were rejected under 35 U.S.C. §101 as not falling within one of the four statutory categories of invention. The Examiner asserts that the claims do not tie to a particular machine and also do not involve a "physical or chemical transformation" or a "qualifying data transformation" since the claims' steps do not represent a physical/real object or

depict the modified data as an external representation of the physical object or substance, such as but not limited to a visual display. Office Action at Pages 4-5.

Applicants respectfully disagree with the Examiner's assessment. In particular, Applicant's disagree with the Examiner's statement that the steps do not represent a physical/real object. As would be appreciated by a skilled artisan, the step of acquiring an image of a ball or club represents a physical act on a real object. In addition, comparing the acquired image to a reference image and identifying the club or ball using Eigen values based on this comparison represents a "qualifying data transformation."

However, in the interest of expediting the allowance of the claims, Applicants have amended claims 1 and 9 to recite that the image is acquired by at least one camera system and the clubs and golf balls are identified by a computational device. As such, Applicants respectfully request reconsideration and withdrawal of the §101 rejection based thereon.

THE REJECTION UNDER 35 U.S.C. § 112

Claims 2-3 and 9-14 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement for the reasons provided on pages 5-6 of the Office Action. In particular, the Examiner is of the opinion that the specification does not enable one skilled in the art to "make sure of an automatic identification of golf clubs or golf balls [in] less than 6 seconds or 1 second." Office Action at Page 5.

As a threshold matter, claims 2 and 3 feature the step of identifying in about six seconds or less and about one second or less respectively. Thus, Applicants note that these claims are inclusive of the six seconds and one second rather than starting below these time frames as apparently viewed by the Examiner.

Applicants respectfully submit that claims 2-3 and 9-14 are sufficiently enabled. In fact, the Written Description teaches that

> [t]he system comprises at least one camera system and a computational device capable of identifying an acquired image from a library of stored reference information. In a preferred embodiment, the system identifies the acquired image based on the inherent features of the clubs and balls. The system may use a mathematical algorithm, such as Eigen values, to distinguish between the inherent features of a plurality of clubs and balls.

Page 4, lines 21-26. Furthermore, the Written Description teaches that

> [i]n order to extract useful information about the club and ball, such as that described above, the mathematical algorithm should be able to identify and match a pattern rapidly from a large list of stored patterns. It is desired that the time period for identification be about one second or less... Preferably, the present invention takes about six seconds or less to identify a pattern.

Page 8, lines 18-26.

In light of the disclosure, Applicants respectfully submit that a skilled artisan would be enabled to perform the recited method and, in particular, ensure identification of the club or ball in the time frame featured in the claims. Thus, Applicants respectfully request reconsideration and withdrawal of the rejection.

THE REJECTIONS UNDER 35 U.S.C. § 103

Claims 1-3, 7, 9, and 15-16 were rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent Publication No. 2001/0029207 to Cameron et al. ("Cameron") in view of U.S. Patent Publication No. 2002/0038294 to Matsugu ("Matsugu"). In addition, the Examiner rejected claims 4-6, 10-13, and 17-18 under § 103(a) as being obvious over Cameron and Matsugu in view of U.S. Patent No. 7,184,569 to Lawandy. Finally, the Examiner rejected claims 19-21 under § 103(a) as being obvious over Cameron.

As a threshold matter, the Examiner has misstated Applicants' arguments in the previous response dated March 20, 2008. The Examiner asserted that Applicants argued Cameron does not teach acquired image comparison to stored images. Office Action at Page 2. In fact, Applicants argued that Cameron does not disclose or suggest a system or method to identify a club or ball from an acquired image through comparison of that image to a stored library of images, as presently recited. March 20, 2008 Response at Page 8 (emphasis added). Regardless, as discussed below, Cameron alone, or in combination with the other cited references does not disclose or suggest the present invention.

Cameron Does Not Disclose or Suggest the Present Invention

The performance monitor of Cameron takes images of a golfer's swing in order to analyze the golfer's swing and properly fit the golfer for a club. *See, e.g.*, Abstract. To accomplish this goal, Cameron takes images of the positions of a golf club during a swing. Para. [0011]. In contrast, the present invention is directed to a method and system for identifying a particular golf club or ball from stored reference information.

In fact, Cameron clearly teaches that, before reviewing and analyzing a golfer's swing, the golfer "must first be equipped with a putter of known dimensions (step 50)." Para. [0025] (emphasis added). Cameron further clarifies that the image acquisition occurs only after "golfer 10 has been fitted with a golf club of known dimensions." Para. [0027]. In addition, Cameron stresses the importance of using a club with known dimensions in order to facilitate proper fitting of a golf club to a golfer. Para. [0026].

As such, Cameron does not disclose or suggest a system or a method of identifying a club or golf ball, but rather is directed toward a performance monitor capable of analyzing a golfer's swing by identifying the position of a known club head. Para. [0011].

Neither Matsugu nor Lawandy Remedy the Deficiencies of Cameron

Matsugu is directed to a method and apparatus for pattern recognition. Matsugu is completely silent as to golf clubs or golf balls. The Examiner suggests that the motivation to modify Cameron's method according to Matsugu is to improve the identification processing. Office Action at Page 7. Even assuming for the sake of argument that a skilled artisan would look to Matsugu to modify the method of Cameron, the result would still not be a system and method that identifies a particular golf ball or club. As discussed above, Cameron discloses a system and method of identifying the position of a known golf club head. Para. [0011]. As such, the method of Matsugu would merely serve as an alternative method of identifying the position of a known club during a golf swing.

Lawandy was cited by the Examiner for its disclosure of types of markers that can be used on articles. Office Action at Pages 8-9. However, Lawandy is completely silent as to a method or system for identifying golf balls or golf clubs. Because Cameron lacks teaching of the salient features of the presently recited invention and Lawandy is similarly deficient, this combination of references would not render obvious the present invention to a skilled artisan.

In light of the foregoing, Applicants respectfully submit that none of the cited references alone, or in any combination, render obvious the presently recited invention. Reconsideration and withdrawal of the §103 rejection is respectfully requested.

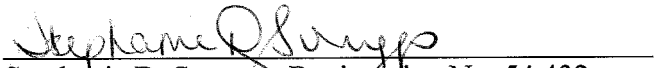
CONCLUSION

All claims are believed to be in condition for allowance. If the Examiner believes that the present amendments still do not resolve all of the issues regarding patentability of the pending claims, Applicants invite the Examiner to contact the undersigned attorneys to discuss any remaining issues.

A Petition for an Extension of Time is submitted to extend the time for response two months to and including October 20, 2009. No other fees are believed to be due at this time. Should any fee be required, however, please charge such fee to Hanify & King, P.C. Deposit Account No. 50-4545, Order No. 5222-085-US01.

Respectfully submitted,
HANIFY & KING
Professional Corporation

Dated: October 20, 2009

By: 
Stephanie D. Scruggs, Registration No. 54,432
HANIFY & KING
Professional Corporation
1055 Thomas Jefferson Street, N.W., Suite 400
Washington, D.C. 20007
(202) 403-2105 Telephone
(202) 429-4380 Facsimile